



City of Riverside - Building and Safety

# RESTAURANT CONSTRUCTION GUIDELINES



## What's on the MENU

- The importance of an experienced design team
- The importance of an experienced construction team
- Review the City's construction standards and guidelines for Commercial Hoods
- Examine numerous disabled access requirements and drawings

## **GUIDELINES FOR RESTAURANT CONSTRUCTION**

Constructing a new restaurant can be a challenging process. Nevertheless, those challenges can be substantially reduced if you will review the guidelines and recommendations contained in this brochure. The successful restaurateur must first realize that the applicable building codes have become much more intense over the past several years. Due to those numerous changes and the sophisticated nature of the design and construction needs for restaurants, we recommend that you solicit the assistance of a design professional who has specific experience in restaurant design and construction. Here are a few points to keep in mind:

**Hire qualified professionals to assist you.** Obtain qualified design and construction assistance from experienced Architects, Engineers, and Contractors. The additional cost of hiring qualified professionals, experienced in restaurant design and construction, will help to eliminate many problems during the plan review and construction phases of the project. Generally speaking, the more experienced your team, the smoother the permit and construction process will be. These professionals can help you to navigate the numerous challenges inherent with restaurant design and construction and you will be more likely to open your restaurant on time because problems are eliminated before they occur.

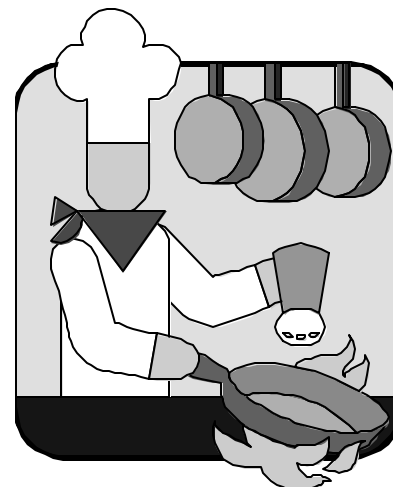
**Ask Questions before you complete the design work.** The City's plan review staff are eager to discuss the varied and highly technical requirements of the building codes with you and your design team. Please seek our input and assistance early in the design process.

**Ask Questions during the construction phase.** The role of the Building Inspector is to assure that construction meets the minimum standards established by the State of California so that your patrons enjoy a certain level of safety. Unfortunately, the Building Inspector is often the bearer of bad news when some aspect of the construction does not meet

the minimum standards. The best way to avoid bad news (usually in the form of a correction notice from the Building Inspector) is to use the Building Inspector as your unofficial construction advisor. Ask them questions about specific aspects of the work before the work is actually performed. In many cases, the Building Inspector can give you a "heads-up" before a problem is created, if you will merely ask for their input early on in the process. Feel free to schedule a Building Inspector to visit your job site as often as you feel is necessary to keep problems in check.

**Check with the Riverside County Department of Environmental Health.** The Riverside County Department of Environmental Health has specific requirements for restaurants. Access to a variety of information is available through their web site ([www.rivcoeh.org](http://www.rivcoeh.org)). Check their AForms and Guidelines@ page for specific information on restaurant requirements.

**Do your part to be informed.** Restaurant construction is challenging. Although we have attempted to provide you with these generic guidelines, each restaurant will have its own unique challenges. It is not possible for us to foresee the unlimited variety and scope of all the potential problems that may be encountered. However, if you will do your part to be informed and to bring together a qualified and experienced team, most problems can easily be rectified early in the process. Please take the time to review all of the information in this brochure and ask us any questions that arise. In addition, please feel free to log-on to our Internet Web site ([www.riversideca.gov/planning/building](http://www.riversideca.gov/planning/building)) for additional information.



## **TOP 20 DISABLED ACCESS REQUIREMENTS FOR RESTAURANTS**

### **NEW CONSTRUCTION**

In new construction, all dining areas, including raised or sunken dining areas, loggias, and outdoor seating areas, shall be accessible.

#### **EXCEPTIONS:**

- A) In existing buildings, when the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
- B) In existing buildings, these regulations shall not apply when legal or physical constraints would not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship.

### **GENERAL**

1. In buildings and facilities, floors of a given story are a common level throughout, or are connected by pedestrian ramps, passenger elevators or special access lifts. **1120B.1**

#### **EXCEPTIONS:**

- A) In existing buildings, other than dining, banquet and bar facilities, when the enforcing agency determiners that compliance with this section would create an unreasonable hardship, an exception shall be granted when equivalent facilitation is provided.
- B) In new and existing dining, banquet and bar facilities, when the enforcing agency determiners that compliance with this section would create an unreasonable hardship, an exception shall be granted provided that a minimum of 75 percent (75%) of the dining, banquet and bar area shall be a common level throughout or shall be connected by pedestrian ramps, passenger elevators or special lifts. See Section 101.17.11, Item 1.4, for new building only.



## **City of Riverside Building & Safety Division Restaurant Construction Guidelines**

C) In existing building, this section shall not apply when legal or physical constraints would not allow compliance with this section or equivalent facilitation without creating an unreasonable hardship. See Section 101.17.11, Item r.

D) Where specifically exempted in other portions of this code.

2. Access to facilities is provided at entrances and exits as required. **1104B.5.2**

3. Wheelchair access is provided to each type of functional activity in the facility. **1104B.5.3**

4. Restrooms and powder rooms are accessible (See applicable Sections). **1104B.5.7**

5. Disabled parking is provided and a compliant path of travel to the entrance(s) is available. **1129B.1**

6. At least 5%, but not less than one of the seating spaces in each functional area is accessible as follows: **1104B.5.4**

A) Minimum 30" x 48" clear floor space is provided. **1122B.3**

B) One full unobstructed side of the clear floor space adjoins or overlaps an accessible route or another wheelchair clear floor space. **1122B.3**

C) Knee space at tables is at least 27" high, 30" wide and 19" deep. **1122B.3**

D) Height of tables is between 28" - 34" from the floor or ground. **1122B.4**

7. Access to accessible seating space(s) is provided by main aisles a minimum of 36" in width. **1104B.5.4**

8. Equivalent services and decor are provided at accessible seating spaces as for the general public. **1104B.5.4**

9. Accessible seating spaces are integrated with general seating and allow a reasonable selection of seating area and avoid having one area specifically highlighted as the area for persons with disabilities. **1104B.5.4**

## COUNTERS

10. If seating spaces for persons in wheelchairs are provided at counters where food or drink is served, the counter has a minimum 60" long portion that has the following: **Fig. 6-B**

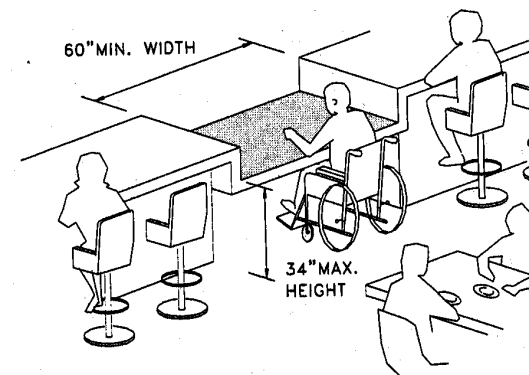
A) Top of counter is between 28" - 34" above the finish floor. **1122B.4 Fig. 6-B**

B) Knee clearance a minimum 27" high, 30" wide and 19" deep. **1122B.3**

C) Clear floor space a minimum of 30" by 48". **1122B.3**

D) Clear floor space adjoins an accessible routes. **1122B.3**

IN RESTAURANTS AND CAFETERIAS, WHERE FOOD OR DRINK IS SERVED AT COUNTERS EXCEEDING 34" IN HEIGHT FOR CONSUMPTION BY CUSTOMERS SEATED ON STOOLS OR STANDING AT THE COUNTER, A PORTION OF THE MAIN COUNTER WHICH IS A MINIMUM OF 60" IN LENGTH SHALL BE PROVIDED WHICH IS A MAXIMUM OF 34" IN HEIGHT, AND PROVIDES KNEE CLEARANCE THAT IS AT LEAST 27" HIGH, 19" DEEP, AND 30" WIDE.



**Fig.6-B**  
**COUNTERS**

## FOOD SERVICE LINES/AISLES

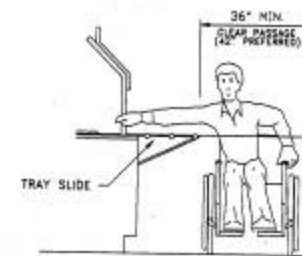
11. Minimum clear width of 36" is provided. (42" preferred). **1104B.5.5**

12. Tray slides are mounted a maximum of 34" above floor. **1104B.5.5**

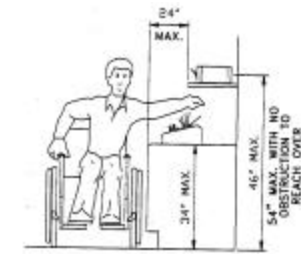
13. 50% of each type of self-service shelves are within required reach ranges (54" maximum height, side reach). **1104B.5.5 Fig. 7-A**

14. Tableware, dishware, condiments, food and beverage display shelves, and dispensing devices are located within accessible reach ranges. **1104B.5.6**

15. Table tops and counters on which tableware, condiments, etc. are placed are between 28" and 34" from the floor surface. **1104B.5.6 Fig. 7-B**



**Fig.7-A**  
**FOOD SERVICE LINES**



**Fig.7-B**  
**TABLEWARE AND CONDIMENT AREAS**

## RAISED PLATFORMS

16. Raised platforms or lecterns in banquet rooms or where a head table or speakers, platform are located are accessible.

17. Open edges of raised platforms have curbs or other barriers.

## VENDING MACHINES

18. Vending machines are on an accessible route and comply with required reach ranges.

## FOOD PREPARATION AREAS

19. Access to food preparation areas shall comply with the provisions for entrance doors, doorways, and aisles. **1104B.5.8**

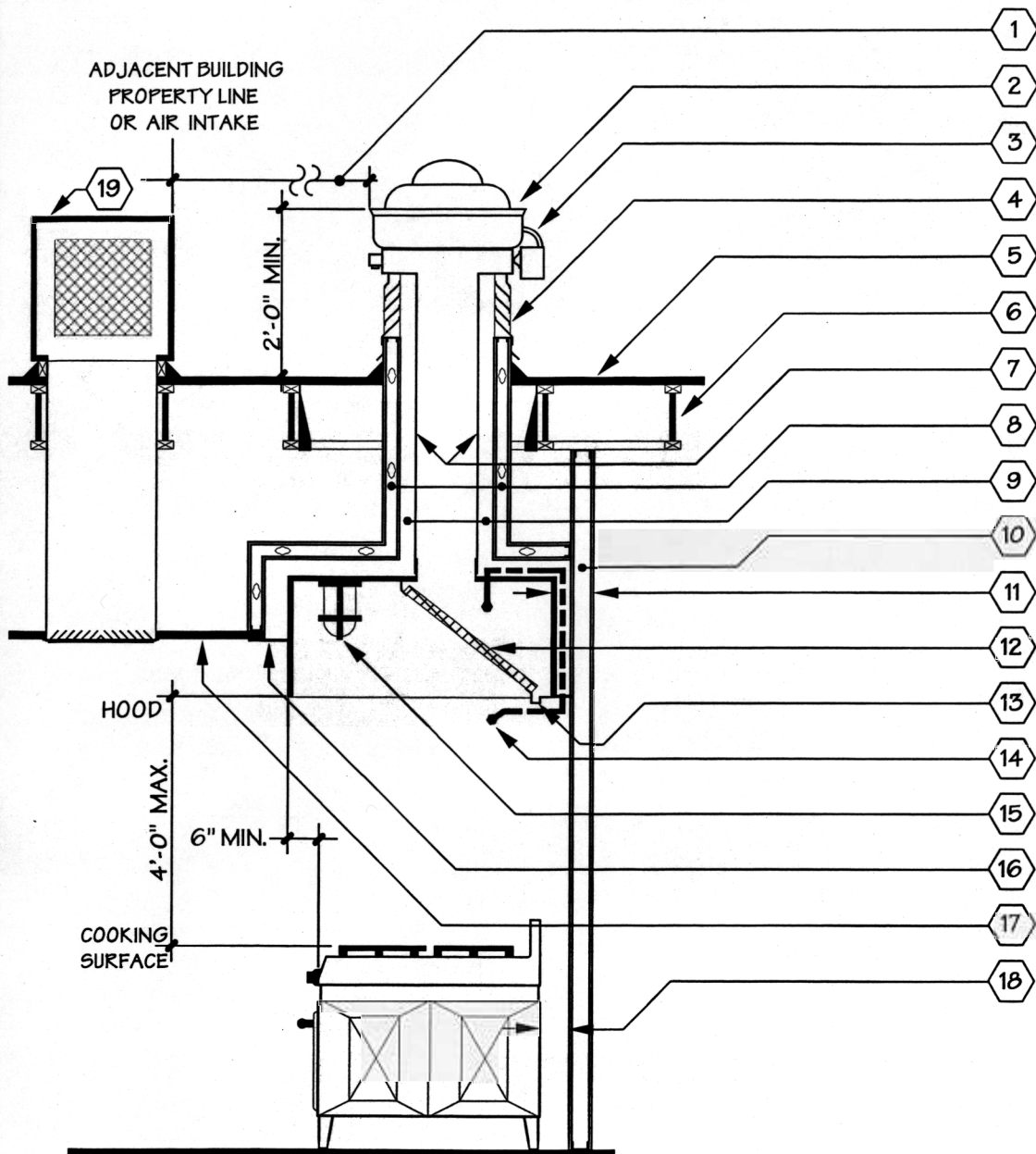
**NOTE:** Employee-only areas must be designed to provide access into, through and out of the area.

## CHECK STANDS

20. In new construction, check stands, including service counters requiring a surface for transactions, shall be made accessible by providing a 36" aisle on the customer side of the check stand. **1110B.1.3**



# City of Riverside Building & Safety Division Restaurant Construction Guidelines



# KEYNOTES

- 1 10 ft. MIN. FROM ADJACENT BUILDING, PROPERTY LINE OR AIR INTAKE OPENING  
may be reduced to 5 ft. if exhaust air is discharged away from such locations  
ref.: 2000 UMC Sec. 508.9
- 2 AIR VELOCITY FOR TYPE I EXHAUST HOODS  
min. 1,500 fpm to max. 2,500 fpm  
ref.: 2000 UMC Sec. 508.6
- 3 ELECTRICAL DISCONNECT  
ref.: 1999 NEC Art. 422-35
- 4 VENT RELEASE FOR HEATED AIR AROUND EXHAUST DUCT  
ref.: 2000 UMC Sec. 508.4
- 5 ROOF SURFACE
- 6 ROOF FRAMING MEMBERS
- 7 FULLY WELDED DUCT & PLENUM  
min. no. 16 manufacturer's standard gage steel or stainless steel  
bolts, screws, rivets and other mechanical fasteners shall not penetrate duct walls  
duct bracing and supports shall be noncombustible  
ref.: 2000 UMC Sec. 508.1
- 8 1-HOUR FIRE-RESISTIVE DUCT ENCLOSURE  
min. 2-HOUR duct enclosure in buildings of TYPE I & TYPE II fire-resistive construction  
ref.: 2000 UMC Sec. 508.4
- 9 AIR SPACE AROUND DUCT ENCLOSURE  
min. 3 inches to max. 12 inches clearance  
ref.: 2000 UMC Sec. 508.4
- 10 WALL FRAMING @ SIDE & REAR OF COOKLINE  
metal studs @ 16 inches on center with (1) layer 5/8 inch Type "X"  
water-resistant gypsum board -OR-  
where wood studs are used or plywood is applied to metal studs on cookline side of wall,  
two (2) layers of 5/8 inch Type "X" water-resistant gypsum board shall be applied
- 11 HOOD-TO-WALL CLEARANCE  
min. 18 inches from combustible construction  
clearance may be reduced to min. 3 inches if combustible material is protected  
with materials of 1-hour fire-resistive construction (5/8 inch Type "X" gypsum board) on  
the hood side of the wall  
ref.: 2000 UMC Sec. 508.8
- 12 GREASE FILTER or EXTRACTOR  
ref.: 2000 UMC Sec. 509.5
- 13 GREASE GUTTER  
ref.: 2000 UMC Sec. 509.3
- 14 FIRE EXTINGUISHING SYSTEM  
ref.: 2000 UMC Sec. 510.2 & UFC
- 15 LIGHT FIXTURE  
listed for use within commercial cooking hoods; vapor, grease and oil-tight lamp & wiring  
compartments and; housing shall be smooth and corrosion-resistant  
ref.: 1999 NEC Art. 410-4(c)
- 16 METAL CLOSURE FLASHING AROUND HOOD  
required where hood is less than 12 inches from ceiling or wall  
min. no. 22 gage galvanized steel or stainless steel  
ref.: 2000 UMC Sec. 509.4
- 17 CEILING
- 18 EQUIPMENT - TO - WALL CLEARANCE  
equipment shall be installed in accordance with manufacture's installation instructions
- 19 MAKEUP AIR  
each room provided with an exhaust system shall have air supplied to the room equal to the  
amount of air to be exhausted  
the exhaust air and makeup air systems shall be connected by an electrical interlocking switch  
ref.: 2000 UMC Sec. 509.9

WHERE REQUIRED:  
Type I hoods shall be installed at or above all commercial-type deep fat fryers, broilers, fry grills, rotisseries and ranges  
ref.: 2000 UMC Sec. 509.1

HOOD MATERIALS:  
Type I hoods shall be constructed of galvanized steel, stainless steel, copper or other materials  
approved by the building official  
ref.: 2000 UMC Sec. 509.2

## TYPE I EXHAUST HOOD & DUCT ENCLOSURE



City of Riverside  
Building & Safety Division

TYPE I EXHAUST HOOD & DUCT ENCLOSURE

SCALE NONE

PGH 01/04  
DRAWN DATE

REV. DATE APPR.

1  
2  
3  
4  
5

COMMERCIAL  
KITCHEN HOOD  
& EXHAUST

RM-1.0

SHEET

## **ADDITIONAL RESOURCES ARE AVAILABLE**

**In an effort to provide you with a sample of the various informational handouts concerning disabled access standards that are available from the Building and Safety Division, we have included the following two handouts in this brochure:**

**RDA – 1.0 Accessible Parking and Paths of Travel**

**RDA – 3.0 Accessible Toilet Rooms**

**Numerous other handouts concerning disabled access standards are available on our Web site, located at *[www.riversideca.gov/planning/building/detail.htm](http://www.riversideca.gov/planning/building/detail.htm)* or from the Building and Safety Division's counter at City Hall. The following is a list of some of the additional handouts which are available.**

**RDA – 2.0 Accessible Ramps and Landings**

**RDA – 4.0 Accessible Doors**

**RDA – 4.1 Maneuvering Clearances**

**RDA – 5.0 Accessible Trash Enclosures**

**RDA – 6.0 Detectable Warnings**







City of Riverside  
Building & Safety Division  
DISABLED ACCESS STANDARDS

SCALE **NONE**

PGH **6/02**  
DRAWN DATE

REV.	DATE	APPR.
1		
2		
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4		
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ACCESSIBLE  
PARKING &  
PATHS OF TRAVEL

RDA - 1.0

SHEET

AT PARKING LOT ENTRANCE(S)

THIS SIGN SHALL:

- BE POSTED IN A CONSPICUOUS LOCATION AT EACH ENTRANCE TO OFF-STREET PARKING FACILITIES.
- BE MIN. 17" x 22" IN SIZE
- HAVE LETTERING NOT LESS THAN 1-INCH HIGH
- HAVE BLANK SPACES FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN.  
(CONTACT CITY OF RIVERSIDE POLICE DEPARTMENT FOR SPECIFIC INFORMATION)

UNAUTHORIZED VEHICLES  
PARKED IN DESIGNATED  
ACCESSIBLE PARKING SPACES  
NOT DISPLAYING DISTINGUISH-  
ING PLACARDS OR LICENSE  
PLATES FOR PERSONS WITH  
DISABILITIES MAY BE TOWED  
AWAY AT OWNER'S EXPENSE.  
TOWED VEHICLES MAY BE  
RECLAIMED AT:

OR BY TELEPHONING:

AT EACH PARKING SPACE (POST- OR WALL-MOUNTED)

THIS SIGN SHALL:

- BE PERMANENTLY POSTED AT EACH PARKING SPACE RESERVED FOR PERSONS WITH DISABILITIES.
- BE REFLECTORIZED.
- CONSIST OF A PROFILE VIEW OF A WHEELCHAIR WITH OCCUPANT IN WHITE ON DARK BLUE BACKGROUND.
- NOT BE SMALLER THAN 70 SQUARE INCHES IN AREA.
- BE POSTED AT MIN. 80 INCHES ABOVE THE PARKING SPACE FINISHED GRADE -OR- MAY BE CENTERED ON THE WALL AT THE INTERIOR END OF THE PARKING SPACE AT A MINIMUM HEIGHT OF 36" FROM THE PARKING SPACE FINISHED GRADE, GROUND, OR SIDEWALK.
- WHEN SPACES ARE REQUIRED TO BE VAN ACCESSIBLE, AN ADDITIONAL SIGN STATING "VAN ACCESSIBLE" SHALL BE MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY.



AT EACH PARKING SPACE (ON PAVED SURFACE)

THIS SIGN SHALL:

- DEPICT THE OUTLINE OF A PROFILE VIEW OF A WHEELCHAIR WITH OCCUPANT IN WHITE ON BLUE BACKGROUND.
- BE LOCATED SO THAT IT IS VISIBLE TO A TRAFFIC ENFORCEMENT OFFICER WHEN A VEHICLE IS PROPERLY PARKED IN THE SPACE.
- BE 36 INCHES WIDE BY 36" HIGH.

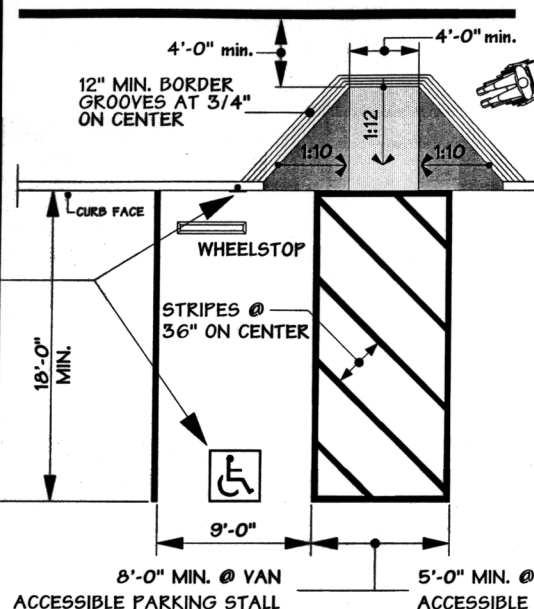


IDENTIFICATION OF ACCESSIBLE PARKING SPACES

- ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE.
- ACCESSIBLE PARKING SPACES SHALL BE SO LOCATED THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND PARKED CARS OTHER THAN THEIR OWN.
- ACCESSIBLE PARKING SPACES SHALL BE: MIN. 9'-0" WIDE x 18'-0" LONG  
ADJACENT ACCESS AISLES SHALL BE: MIN. 5'-0" WIDE @ TYPICAL ACCESSIBLE PARKING STALL  
MIN. 8'-0" WIDE @ VAN ACCESSIBLE PARKING STALL.
- THE SURFACE SLOPE OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 1/4" per 1'-0" (2%) IN ANY DIRECTION.

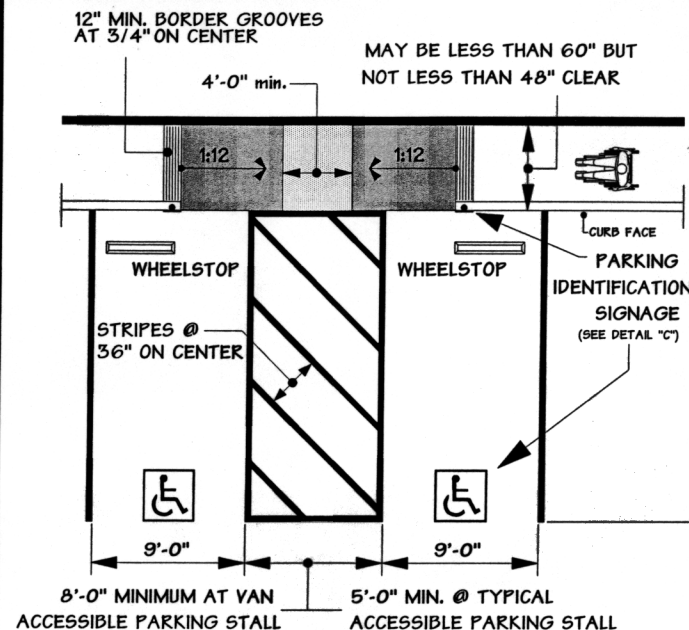
ACCESSIBLE PARKING REQUIREMENTS

F



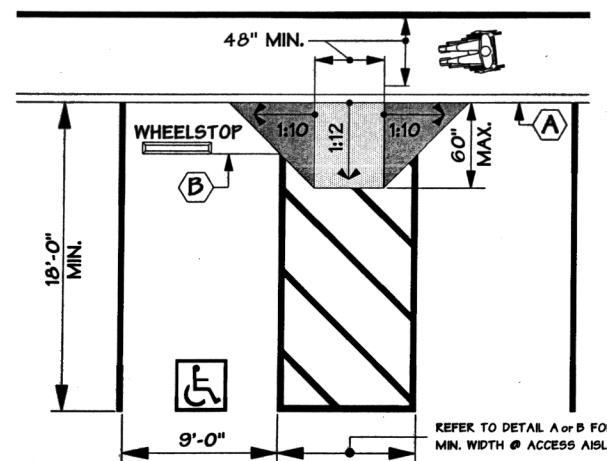
SINGLE PARKING STALL W/ CURB-CUT RAMP

B



DOUBLE PARKING STALLS W/ CURB-CUT RAMP

A



SINGLE PARKING STALL W/ BUILT-UP CURB RAMP

E

!!! CAUTION !!!

A A BUILT-UP CURB RAMP MAY ONLY BE USED WHEN CURB HEIGHT DOES NOT EXCEED 5 INCHES ABOVE ADJACENT PARKING SURFACE.

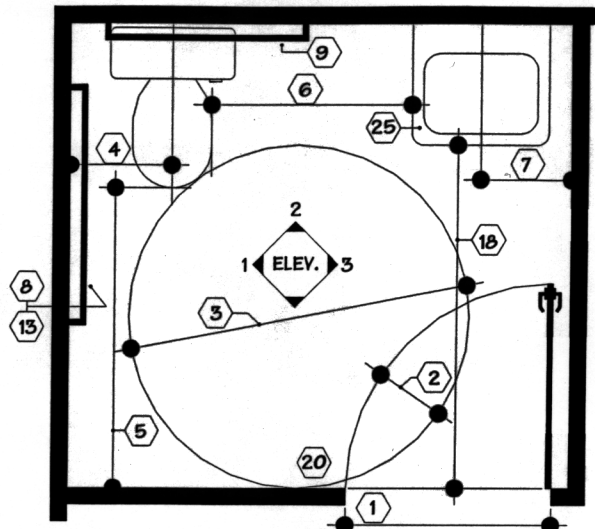
B WHEELSTOP SHALL BE POSITIONED SUCH THAT THE LEADING EDGE WILL PREVENT THE TIRE FROM CONTACTING THE SIDE FLARED PORTION OF THE BUILT-UP CURB RAMP.

TOTAL PARKING SPACES PROVIDED IN EACH PARKING AREA	REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of TOTAL
1001 & OVER	20 PLUS 1 FOR EACH 100 OVER 1000

- ONE IN EVERY EIGHT ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESS AISLE 96 INCHES WIDE MINIMUM AND SHALL BE DESIGNATED VAN ACCESSIBLE.
- AT LEAST 10 PERCENT OF THE TOTAL NUMBER OF PARKING SPACES AT OUTPATIENT UNITS AND FACILITIES PROVIDING MEDICAL CARE AND OTHER SERVICES FOR PERSONS WITH MOBILITY IMPAIRMENTS SHALL BE ACCESSIBLE.

REQUIRED ACCESSIBLE PARKING STALLS

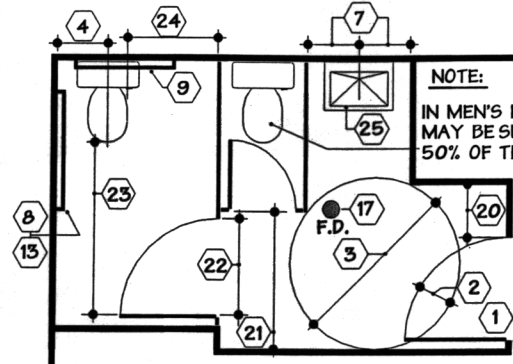
D



OTHER DOOR AND FIXTURE LAYOUTS ARE POSSIBLE, HOWEVER THE MINIMUM DIMENSIONS NOTED MUST BE MET.

SINGLE ACCOMMODATION TOILET ROOM

A



OTHER DOOR AND FIXTURE LAYOUTS ARE POSSIBLE, HOWEVER THE MINIMUM DIMENSIONS NOTED MUST BE MET.

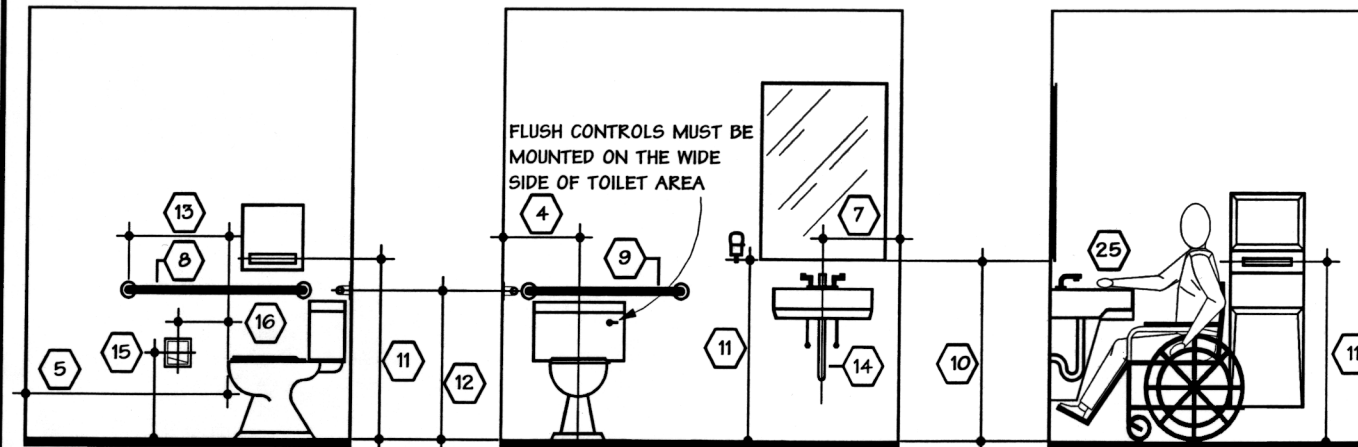
MULTIPLE ACCOMMODATION TOILET ROOM

B



## KEYNOTES

- 1 3068 DOOR w/ MIN. 32" CLEAR WIDTH OPENING.
- 2 MAX. 12" OVERLAP.
- 3 MIN. 60" DIA. TURNING CIRCLE.
- 4 18" TO CENTERLINE OF TOILET.
- 5 MIN. 48" CLEAR IN FRONT OF TOILET.
- 6 MIN. 28" BETWEEN TOILET & LAVATORY.
- 7 MIN. 18" TO CENTERLINE OF LAVATORY.
- 8 MIN. 42" LONG GRAB BAR @ SIDE OF TOILET.
- 9 MIN. 36" LONG GRAB BAR @ REAR OF TOILET.
- 10 MAX. 40" ABOVE FINISHED FLOOR TO BOTTOM EDGE OF MIRROR.
- 11 MAX. 40" ABOVE FINISHED FLOOR TO DISPENSERS AND ACCESSORIES.
- 12 GRAB BARS MOUNTED @ 33" ABOVE FINISHED FLOOR.
- 13 EXTEND SIDE GRAB BAR MIN. 24" BEYOND FRONT OF TOILET.
- 14 INSULATE ALL EXPOSED PIPES UNDER LAVATORY.
- 15 TOILET TISSUE DISPENSER @ MIN. 19" ABOVE FINISHED FLOOR.
- 16 TOILET TISSUE DISPENSER @ MAX. 12" IN FRONT OF TOILET SEAT.
- 17 FLOOR DRAIN REQUIRED IN MULTIPLE ACCOMMODATION TOILET ROOMS.
- 18 MIN. 60 INCHES CLEAR ON "PULL" SIDE OF DOOR.
- 19 NOT USED
- 20 MIN. 18" CLEAR AT STRIKE SIDE OF DOOR.
- 21 MIN. 44" CLEAR WIDTH TO ACCESSIBLE TOILET COMPARTMENT.
- 22 MIN. 34" CLEAR WIDTH AT SIDE OPENING COMPARTMENT. MIN. 32" CLEAR WIDTH AT END OPENING COMPARTMENT.
- 23 MIN. 60" CLEAR IN FRONT OF TOILET IN COMPARTMENT WITH SIDE OPENING DOOR. MIN. 48" CLEAR IN FRONT OF TOILET IN COMPARTMENT WITH END OPENING DOOR.
- 24 MIN. 32" CLEAR BETWEEN TOILET & PARTITION.
- 25 SEE DETAIL BELOW FOR ADDITIONAL CLEARANCE DIMENSIONS AT LAVATORY



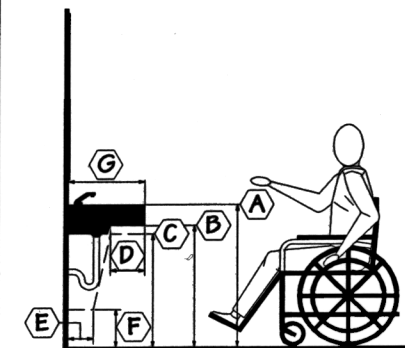
ELEVATION 1

ELEVATION 2

ELEVATION 3

INTERIOR ELEVATIONS

C



- A = MAX. 34"
- B = MIN. 29"
- C = MIN. 27"
- D = MIN. 8"
- E = MIN. 6"
- F = MIN. 9"
- G = MIN. 17"

KEYNOTES

D



## City of Riverside Building & Safety Division DISABLED ACCESS STANDARDS

SCALE **NONE**

PGH 6/02  
DRAWN DATE

REV.	DATE	APPR.
1		
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**ACCESSIBLE  
TOILET  
ROOMS**

**RDA - 3.0**

SHEET